

*Obs. B. rufinucha* (Lafr. et D'Orb.) \* macula frontali utrinque sulphurea sane species diversa est.

Slater has long had two examples of this species in his collection obtained from the Maison Verreaux. They were referred to *B. rufinucha* erroneously, as it appears on examination of the specimens of that species in the British Museum. Mr. Buckley sends us five examples of this bird, all obtained at Simacu.

### 3. LEPTOPOGON TRISTIS, sp. nov.

*Supra olivaceus, unicolor; alis nigris, tectricum alarium et secundariorum apicibus macula quadrata sulphureo-alba ornatis; remigum et rectricum marginibus externis olivaceis: subtus sulphureo-flavus: subalaribus flavis: rostro et pedibus nigris: long. tota 4.4, alæ 2.15, caudæ 2.0, tarsi 0.75.*

*Hab.* Bolivia, Simacu (*Buckley*).

*Mus.* S.-G. et P. L. S.

*Obs.* Sp. corporis colore supra olivaceo, subtus omnino flavo, ab aliis hujusce generis satis definita.

Slater has long had a single worn and imperfect skin of this *Leptopogon* in his collection under the MS. name which we now publish. Mr. Buckley sends but a single specimen. Slater's example was obtained from a dealer in Paris, without any locality attached to it.

### 4. HYPOXANTHUS ATRICEPS, sp. nov.

*Hypoxanthus rivolii*, Sel. et Salv. P. Z. S. 1873, p. 780.

*Hab.* Peruvia alta, Husampilla (*Whitely*); Bolivia, Ramosani (*Buckley*).

*Mus.* S.-G.

*Obs.* Similis *H. rivolii*, sed pileo summo in mari nigerrimo nec rubro.

An examination of a series of skins of this Woodpecker from Columbia, Ecuador, Peru, and Bolivia seems to show the form from the two latter countries is distinct—the head in the male being black, and never acquiring the brilliant crimson of the northern form.

February 15, 1876.

Prof. Mivart, F.R.S., in the Chair.

The following report on the additions to the Society's Menagerie during the month of January 1876 was read by the Secretary:—

The total number of registered additions to the Society's Menagerie during the month of January 1876 was 52, of which 32 were by presentation, 10 by purchase, and 10 were received on deposit. The total number of departures during the same period by death and removals was 78.

\* *Vide* Slater, Syn. Av. Tanagr. p. 25.

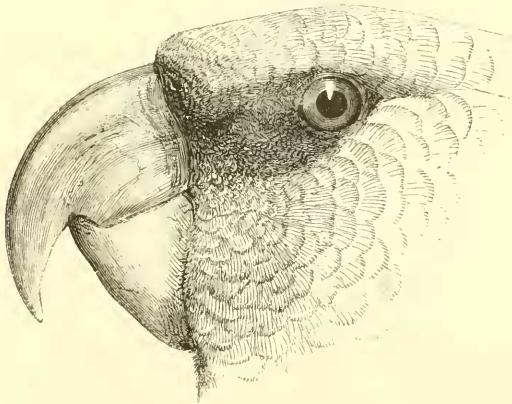
The most noticeable additions during the month were :—

1. A Levaillant's *Cynictis* (*Cynictis penicillata*), presented by Viscount Mandeville, January 5th. Of this rare and elegantly shaped Carnivore (figured in the Society's 'Transactions,' vol. i. pl. iii.) but few specimens have been lately received. One previously obtained was accidentally omitted from the Revised List of Vertebrates, where the species is not mentioned.

2. A White-spotted Crake (*Porzana notata*), captured at sea off Cape Santa Maria, Uruguay, by an officer of the R.M.S.S. 'Elbe,' and received January 19th. The specimen agrees accurately with the figure in the 'Zoology of the Voyage of the Beagle' (Birds, pl. 48). The species is rare, and quite new to the collection.

3. A Panda (*Ælurus fulgens*), sent home from Calcutta, and purchased 16th February, 1876. There has been but one living specimen of this rare animal previously in the collection.

Mr. Sclater exhibited the Parrot designated in Tschudi's 'Fauna Peruana' (Aves, p. 271) *Conurus illigeri*, which had been kindly sent to him for examination by M. Louis Coulon, Honorary Director of the Museum of Neuchâtel, and observed that it had been wrongly determined by the author of the 'Fauna Peruana.' The specimen, which, in spite of what Tschudi said, was certainly not far from mature, presented no traces of the red markings on the front, back, and belly, which are characteristic of *Ara maracana* (i. e. *Conurus illigeri* of Tschudi), and had besides a larger and deeper bill and longer tail. It appeared to belong to a species hitherto unrecognized, which might be described as follows :—



Head of *Ara couloni* (nat. size).

*ARA COULONI*, sp. nov.

*Conurus illigeri*, Tsch. Fauna Per. Aves, p. 271.

*Sittace maracana*, part, Finsch, Papag. i. p. 420.

Diagn. *Viridis, capite undique remigibus et rectricibus extus cæru-*

*lescentibus : caudæ parte basali in rectricibus externis rubricante : alarum et caudæ pagina inferiore flavicante : long. tota 16·0, alæ 8·7, caudæ rectr. med. 9·5, lat. 4·5.*

*Hab.* Peruvia alta, in reg. sylvatica orientali, ab incolis Loro real dicta (*Tschudi*).

*Mus.* Novo-Castellano.

*Obs.* Species ab *Ara maracana* rostro majore, genis solum nudis, area postoculari plumosa, et corporis colore rubro nullo certissimè diversa, et Ludovico Coulon, Musei Novo-Castellani Directori optimo, dicata.

Dr. T. S. Cobbold, F.R.S., exhibited and made remarks on a Parasite (*Echinorhynchus*) obtained from the Tamandua Ant-eater which had died in the Society's Menagerie, and had been described in his communication made at the last meeting.

Mr. W. K. Parker read the second part of his memoir on *Ægithognathous* Birds\*, of which the following is an abstract:—

In my former communication I described thirty-one examples of this kind of palatal structure in birds; in the present paper I have added fifty-one more.

Altogether these eighty-two birds belong to thirty-nine "families;" so that I have taken, on an average, two examples of each family. The materials for this research have been kindly and liberally put into my hands by a number of friends, among whom I may mention Professors Alfred Newton, T. Rupert Jones, and Garrod, Dr. Murie, Osbert Salvin, Esq., Robert Swinhoe, Esq., Mr. W. J. Williams, and Mr. Bartlett.

I began my last paper with a bird showing "*Ægithognathism*" in its initial state. I end this communication with another instance: the first was *Turnix*, this is *Thinocorus*—both of the utmost importance to any one seeking for the true passerine *phylum*.

Now if any one will say that because I have found initial *Ægithognathism* in birds so far down below the most degraded (or rather *non-elevated*) type of *Passerines*, as these birds, that therefore I, putting these types in the *Ægithognathous* list, seek to make them appear as "*Coracomorphæ*," such a one has failed to catch my drift. Do we modern biologists believe in the gradual modification of types or evolution of species, or do we not? If we do, we shall reasonably expect to find that our neatly trimmed and highly special types must have had grosser and more general ancestors in the Tertiary period. Allowing this supposition, and looking upon birds as a hot-blooded group whose *root* lay low down, once, among the cold blooded reptiles, shall we not expect to find birds more or less related to the modern types having the nature of several at once?—"all these in their pregnant causes mixed."

In the examples given in this second part I have shown pecu-

\* For part I. see *Trans. Zool. Soc.* ix. p. 289.

liarities of the skull that belong to certain groups of families, which will, when once understood, be very helpful to Taxonomists. These more minute researches go to modify some of Professor Huxley's views, as expressed in his paper 'On the Classification of Birds' (P. Z. S. 1867, p. 415). Certain it is that the skull of a bird often seems to harmonize very ill with the rest of its structure, even with the rest of the skeleton. Still the morphology of this chief part of the framework, modified as it is in relation to the nervous, digestive, and respiratory systems, must be of the utmost importance to any one seeking to have broad views on these subjects.

"The groups formed by cranio-facial characters have a variable value; the desmognathous face passes over the Struthious border and is possessed by the gallo-struthious Tinamous. The saurognathous face (see Trans. Linn. Soc. 1875, plates i.-v.) is possessed by the "Celeomorphæ" only—namely, by the Woodpeckers and Wry-necks.

"The ægithognathous face is possessed by all the 'Coracomorphæ,' and by them only, *in a perfect form*, with the single exception of the Swifts (Cypselidæ)—a mere big 'genus' capable of being cut up into a few subgenera.

"The desmognathous face turns up in many places; its fundamental or embryonic form is the schizognathous, the simple reptilian cleft palate; this becomes desmognathous by ankylosis of the right and left elements of the palate. Desmognathism is seen in the Ægithognathæ when ossification is very intense, as in *Artamus*, *Paradisea*, and *Gymnorhina*.

"The simple, open, or cleft palate generally occurs in the groups that lie on a level two or three degrees above the Ratitæ, as Rails, Plovers, Cranes, and the Fowl tribe; but it is also retained in types that in other respects are amongst the highest and most specialized, as the Trochilidæ and the Caprimulgidæ.

"In the present paper research has been made into the morphology of the skull in the following groups—namely Tanagridæ, Brachypodidæ, Phytotomidæ, Meliphagidæ, Mniotiltidæ, Cœrebidæ, Vireonidæ, *Cardinalis*, Icteridæ, Emberizidæ, Fringillidæ, Alaudidæ, Paridæ, Panuridæ, Cypselidæ, Hirundinidæ, Oriolidæ, Motacillidæ, Muscipidæ, Liotrichidæ, *Saxicola*, and Nectariniidæ.

"And, lastly, the remarkable skull of *Thinocorus* is described, a small Chilian type, whose body is thoroughly Charadrian, but whose head is a mysterious mixture. Being imperfectly ægithognathous, it is here compared with the completely ægithognathous Passerine types on the one hand, and on the other with birds much nearer akin, namely the Crane and the Sun-bittern. These latter, in an appendix, serve to compare with *Thinocorus*, and also show the schizognathous palate for comparison with the more complex palate of a Passerine bird.

"*Thinocorus*, whilst essentially a Plover, if the characters of the skeleton generally be considered, yet shows more likeness in its skull to that variety of the Plover type which we see in the larger Cranes.

“The Tinamous, largely specialized into a kind of low gallinaceous *carinate* type, yet retain the same form of skull and face as the *Ratitæ*. *Thinocorus* also retains much that is dromæognathous in its skull, mixed with normal schizognathism: but superadded to these characters we find an intimate union of the broad vomer with the largely developed alinasal floor; a little more metamorphosis, and the palate would have corresponded with that of the Passerine birds.

“But in this bird, as in the Hemipod (*Turnix*) it is not in the structure of the vomer and its relation to the nasal labyrinth that we find all the Passerine characters. The face, generally, is rich in such modifications: I showed them in my former Part with regard to *Turnix*, and in this in the genus *Thinocorus*.

“In the marvellously specialized skulls of the Passerinae unlooked-for osseous centres often appear; these are often very uniform in certain families which are more or less allied.

“The first I may mention here are the “palato-maxillaries;” these are a pair of bones, separately representing the ingrowth of our upper jaw-bone which forms the “hard palate.” I find these in the following families, namely Tanagridæ, Brachypodidæ, Mniotiltidæ, Cœrebidæ, Cardinalidæ, Icteridæ, and Emberizidæ. In some families, besides lesser ossicles added to the vomer, one on each shoulder, the vomer is not merely composed of a right and left half, but each moiety is more or less broken up into two centres. Here we have repeated the tetramerous vomer (vomeres and ‘septo-maxillaries’) of the Snake and the Lizard. The families showing this structure more or less clearly are the Mniotiltidæ, Cœrebidæ, Vireonidæ, Muscipapidæ, and Saxicolidæ.

“With the exception of *Menura*, the South-American types are most generalized, low, and, I may say, ancient; next to them the Australian birds, and those from Malaisia and Central America; whilst the most highly specialized types belong to the northern hemisphere generally.

“Looked at from my particular morphological stand-point, facts like these seem to me to be well worth the pleasant labour I have spent in obtaining them.”

This paper will be published entire in the Society’s ‘Transactions.’

The following papers were read:—

1. On a new Order and some new Genera of Arachnida from Kerguelen’s Land. By the Rev. O. P. CAMBRIDGE, M.A., C.M.Z.S., Hon. Memb. New-Zealand Institute.

[Received January 15, 1876.]

(Plate XIX.)

The few examples of Arachnida found during the late Transit-of-Venus Expedition to Kerguelen’s Land, and kindly sent to me by the Rev. A. E. Eaton, I propose now to describe and figure. Almost